IN THE CLAIMS:

Please amend the claims as follows.

Claims 1-3 are cancelled.

4. (Currently amended) ~~The method of claim 1 further comprising~~ A method comprising:

receiving a plurality of frames;

storing the frames in a receive buffer, wherein the receive buffer is configured to be accessed in a first-in-first-out fashion;

storing duplicated header information corresponding to each of the frames in a header storage, wherein the header storage is configured to provide access to the duplicated header information in the same order as the frames;

maintaining a timer corresponding to each duplicated header information in the header storage that indicates how long the corresponding duplicated header information has been in header storage;

retrieving duplicated header information from the header storage, wherein the duplicated header information corresponds to a first frame;

prior to the first frame reaching a head position in the receive buffer, making a routing decision for delivering the first frame to its destination based upon the duplicated header information read from the header storage;

retrieving the first frame from the receive buffer; and

routing the first frame based upon the routing decision.

5. (Previously Presented) The method of claim 4 further comprising

retrieving the timer corresponding to the retrieved duplicated header information,

determining whether the timer corresponding to the retrieved duplicated header information exceeds a predetermined maximum value, and

discarding the frame corresponding to the duplicated header information if the timer corresponding to the retrieved duplicated header information exceeds the predetermined maximum value.

Claims 6-7 are cancelled.

8. (Currently amended) The method of claim [[7]] 4 wherein the receive buffer is a first-in-first-out (FIFO) buffer having a head position and a tail position, wherein entries are written to the tail position and are promoted through the FIFO buffer to the head position, and wherein retrieving the first frame from the receive buffer comprises reading the frame at the head position,
further comprising providing a bypass circuit coupled to the header storage, wherein if no duplicated header information is available at the head of the header storage, the bypass circuit makes next-received duplicated header information immediately available.

Claims 9-10 are cancelled.

11. (Currently amended) A frame buffer system comprising:

a receive buffer configured to store a plurality of received frames, wherein the receive buffer is configured to be accessed in first-in-first-out fashion;

a header storage configured to store duplicated header information corresponding to each of the frames in the receive buffer;

transfer logic coupled to the receive buffer and header storage, wherein the transfer logic is configured to make a routing decision for delivering each of the frames in the receive buffer to a destination based on the corresponding duplicated header information read from the header storage, the routing decision being made prior to the corresponding frame reaching a head position in the receive buffer, and to transmit each of the frames to a destination port according to the corresponding routing decision; ~~The frame buffer system of claim 9~~ and

~~further comprising~~ a bypass circuit configured to receive first duplicated header information, wherein when duplicated header information is received, if no preceding duplicated header information is currently stored in the header storage, the bypass circuit is configured to make the first duplicated header information available to the transfer logic.

Claims 12-14 are cancelled.

15. (Currently amended) The frame buffer system of claim [[9]] 11, further comprising a plurality of timers associated with the frames in the receive buffer, wherein each timer indicates the amount of time the corresponding frame has been in the receive buffer.

16. (Original) The frame buffer system of claim 15 wherein the timers are stored in a first-in-first-out (FIFO) timer storage, wherein the timers are promoted through the FIFO timer storage as the corresponding frames are promoted through the receive buffer.

17. (Original) The frame buffer system of claim 15 wherein the timers are stored in a random access timer storage, wherein each timer is associated with one of the frames in the receive buffer.

18. (Currently amended) The frame buffer system of claim [[9]] 11 further comprising a transmit timer associated with the transmit buffer, wherein the transmit timer indicates the amount of time the frame currently residing in the transmit buffer has been in the transmit buffer.

Claims 19-23 are cancelled.